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U. S. DEPARTMENT OF AGRICULTURE

# What Farm Families Spend for Medical Care

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This report has been prepared in the Family Economics Division under the direction of Helen R. Jeter. The data were collected as part of a study of Family Spending and Saving in Wartime by the Bureau of Human Nutrition and Home Economics of the United States Department of Agriculture, in cooperation with the Bureau of Labor Statistics of the United States Department of Labor. The figures cover the year 1941 and were collected early in 1942. Further details from this study of expenditures for medical care will be found in Rural Family Spending and Saving in Wartime, United States Department of Agriculture Miscellaneous Publication 520; a forthcoming publication of the United States Bureau of Labor Statistics, Income, Spending and Saving of American Families; and in Medical Care and Costs in Relation to Family Income, A Statistical Source Book, Social Security Board, Bureau of Research and Statistics Bureau Memorandum 51.

HAZEL K. STIEBELING, Chief
Bureau of Human Nutrition and
Home Economics

# WHAT FARM FAMILIES SPEND FOR MEDICAL CARE

by

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## INTRODUCTION

There are few possessions more important to man than health. Yet we cannot be sure that every citizen has an equal opportunity to share in the services that medical knowledge can provide toward maintaining health. Medical care costs money and it is unequally distributed. Particularly is this true in rural areas. Families are widely scattered. Income in general is low. Hospitals and scientific equipment necessary to the practice of modern medicine are lacking in some areas, inadequate in others.

The war has aggravated the situation. In many rural areas the number of physicians had been slowly declining before the war. The needs of the armed forces took many more.

As important as the decline in numbers, however, has been the decline in efficiency. Rural physicians are becoming the old men of the profession. Their training was in the methods of the past. The isolation of rural practice makes it practically impossible for them to keep abreast of modern medicine.

Recent graduates of the medical schools, even those from rural areas, are not settling in rural areas. They prefer to locate where they can earn an adequate living, consult other physicians, and have access to hospitals and other facilities necessary to continued advancement in their profession. Many younger physicians now in the armed forces will not return to the rural areas where they practiced, but will follow the movement to the cities.

Rural people are searching for solutions to these problems. Even as new methods of providing medical care for farm families are tried out, collection of more data to guide these programs goes on. This publication is written to assist in the discussion of postwar problems. Its purpose is to contribute to the information needed for a successful solution to the problem of making available to every family the full benefit of the knowledge and resources of the medical profession. An obstacle to such solution is cost.

This discussion is limited to medical expenses met directly by families. In most instances, it is still the family that bears the major burden of providing medical care in time of illness, although the community assists through taxation and endowment in providing special equipment and services. The expenditures shown here are the actual practice of families. They are not a guide to what must be spent to provide adequate care. They represent only money paid out or debts incurred and give no indication of the quality of medical care received.

The report is divided into three parts. Part 1 gives information about the medical care expenses of farm families at various income levels. Part 2 discusses the difference between average expenses for large groups of families and what happens to the family pocketbook when illness strikes a particular family. Part 3 contrasts rural and urban expenditures for medical care.

Expenditures for medical care are grouped in this report in the following classifications: Services of physicians, specialists, and surgeons, referred to as physicians' care; dental care; eye care, including refractions and glasses; hospital care; medicines and drugs; and all other. Included in "all other" are care by other practitioners, clinic care, X-ray examination or treatment, nursing care, medical appliances and supplies, and prepayment for medical care.

Farm families are defined as those operating farms; farm laborers are not included in the farm group. Urban families are those in incorporated places of 2,500 population or more. Rural nonfarm families, for brevity called village families, are those in towns of less than 2,500 population, in unincorporated places, and in the open country but not operating farms. Income is money income only, and does not include the value of home-produced food and fuel, or the rental value of owned homes.

The data are from a sample of all families in the United States, representative of economic level, distribution of rural and urban population, type of farming or other occupation.

# PART 1. MEDICAL CARE EXPENDITURES OF FARM FAMILIES AT DIFFERENT INCOME LEVELS

No one can guess what any particular family will need to spend for medical care in a single year, but we can make generalizations about large groups of families. Particularly when families are grouped according to their incomes do patterns in their spending for medical care come into view. Then some differences and some similarities in their medical expenses can be traced.

As farm families' incomes increase, they spend more money on medical care, but this money is a smaller proportion of their incomes. Since in higher income groups families spend more money for other living expenses also, the relationship between the amount spent for medical care and the amount spent for other living expenses remains about the same.

Almost all farm families buy some type of medical care, but the proportion of families buying care is higher among those families whose incomes are higher. Low-income families are faced with the necessity of choosing which type of care they will buy more frequently than families with higher incomes. They report expenditures for physician or dentist when higher income families report expenditures for both physician and dentist. Consequently, the proportion of families buying each type of care increases more rapidly than the proportion buying any care at all.

Since relatively more families at high-income levels buy medical care and since they buy more types of care than low-income families, it is not surprising to find that their expenditures for medical care are higher than those of low-income families. They also spend larger amounts on most of the items of care they buy.

Because of these differences among income groups in the amounts spent for each type of medical care and the variety of care purchased, the relative importance of the individual types of care in the family's total bill for medical care also changes with income. Low-income families depend heavily on the physician, the primary source of medical care, and medicines and drugs, frequently used in self-medication. Families with higher incomes spend more for the physician and for medicines and drugs, but their use of some of the other types of medical care increases at a greater rate. Because of their increased expenditure for hospitalization, nursing, and miscellaneous care, the proportion of their medical care dollar going for physicians' care is slightly less, and the proportion going for medicines and drugs is much less than the proportions of the medical care dollar of low-income families for these same types of care.

All these facts might be interpreted to mean that ill health rises as income increases. This is not the case. Studies of the incidence of illness show that there is more illness among low-income families than among those with high incomes. The latter, however, can afford to buy more preventive care and more treatment for the illnesses they do incur. The pressure of other demands on a limited income keeps many farm families from arranging for the medical care they need.

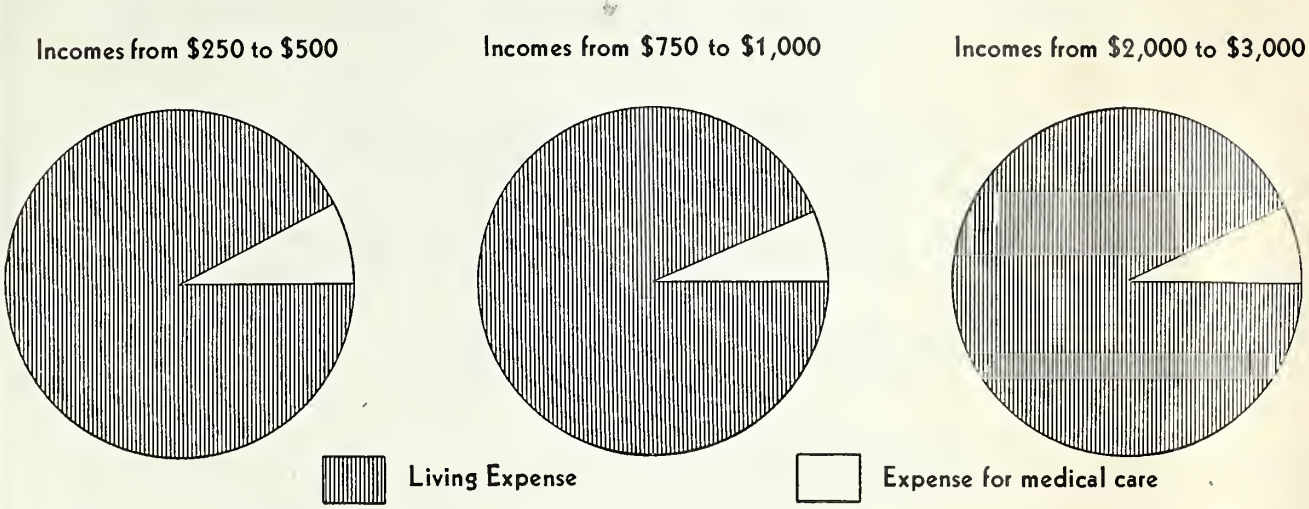
Sufficient income to purchase medical care, however, will not in itself assure the family good care. There must be an opportunity to obtain good care and the realization that it is advantageous. These conditions do not always exist among farm families. The relatively large proportion of higher income farm families reporting no expenditure for dental care during the year covered by this study, for example, indicates that even with money to spend some farm families do not spend it on medical care.

These facts are shown graphically in the following pages.

## FARM FAMILIES DEVOTE A UNIFORM SHARE OF THEIR LIVING EXPENSES AT DIFFERENT INCOME LEVELS TO MEDICAL CARE

If large numbers of families are grouped by size of income, the average expenditure for medical care is about the same proportion of the average living cost for each group.

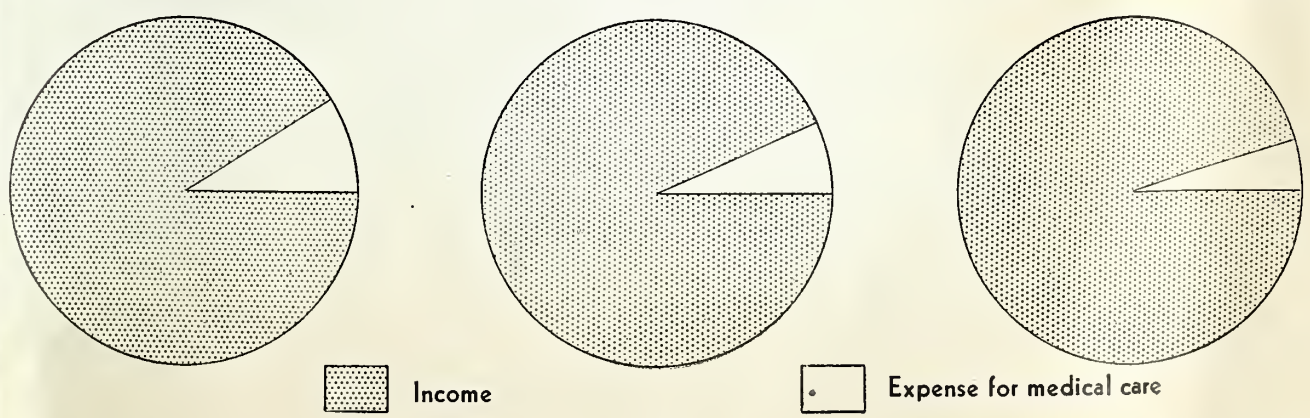
### THE SHARE MEDICAL CARE TAKES OF LIVING EXPENSES AMONG FAMILIES




## FARM FAMILIES SPEND A DECREASING SHARE OF THEIR TOTAL INCOME ON MEDICAL CARE AS THEIR INCOMES INCREASE

Among low-income families almost the whole income, sometimes more than the year's income, must be spent for family living. As income increases, families use a smaller proportion of it for living expenses and are able to save more. Consequently, expenditures for medical care take a larger share of a small than of a large income.

### THE SHARE MEDICAL CARE TAKES OF INCOME AMONG FAMILIES



# AS THEIR INCOMES INCREASE, A LARGER PROPORTION OF FARM FAMILIES BUY MEDICAL CARE

Almost all families spend something for medical care in the course of a year, but the percentage of families spending for certain types of care varies with income. Families with low income are less likely to buy some types of care than families in better circumstances. This is particularly true of dental care and hospital care.

## PERCENTAGE OF FAMILIES BUYING THESE TYPES OF CARE

INCOMES FROM $250 TO $500

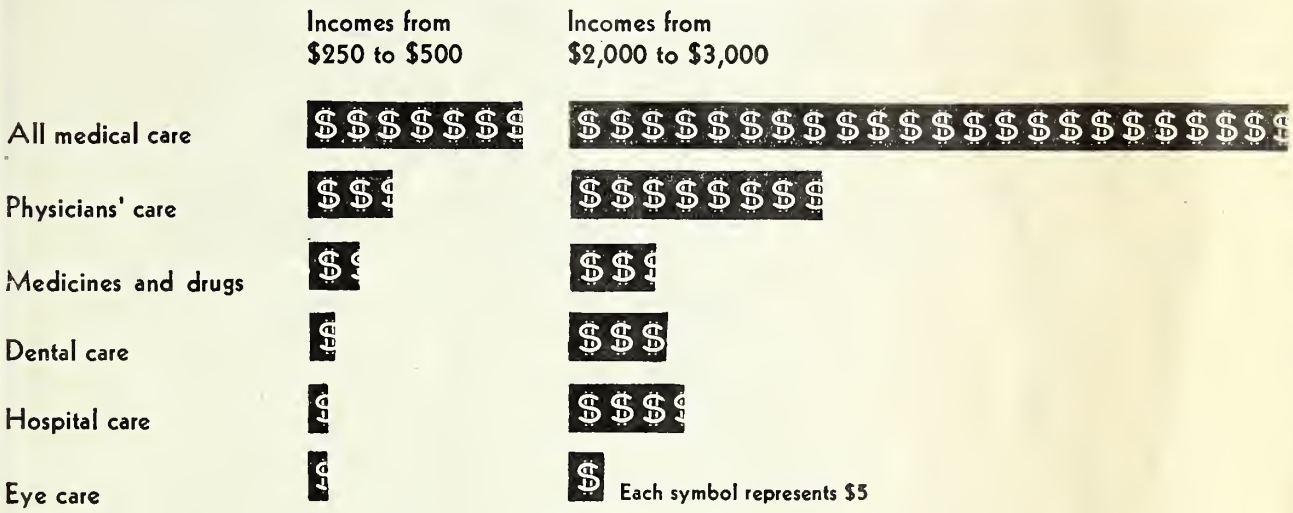
INCOMES FROM $2,000 TO $3,000

Each symbol represents 5 percent of families in the income group

## FARM FAMILIES SPEND MORE MONEY FOR MEDICAL CARE AS THEIR INCOMES INCREASE

Partly because a larger proportion of families buy medical care in high-income groups than in low, and partly because certain families in the high-income groups spend more, the average expenditure for medical care rises with income. Families with incomes from $2,000 to $3,000 spend more, on the average, for physicians' care alone than families with incomes from $250 to $500 spend for all medical care. For all care they spend more than three times as much as this lower income group.

### AVERAGE MEDICAL EXPENSES OF FAMILIES FOR THESE TYPES OF CARE




## FARM FAMILIES WITH HIGHER INCOMES BUY MORE TYPES OF CARE

Although farm families fall short of getting the amount of medical care needed for good health according to accepted medical standards, families in the upper income groups more nearly achieve it than those whose incomes are lower. The proportion of families having no expenditure or expenditure for one type of care only is higher among families with incomes from $250 to $500 than among those with incomes from $2,000 to $3,000.

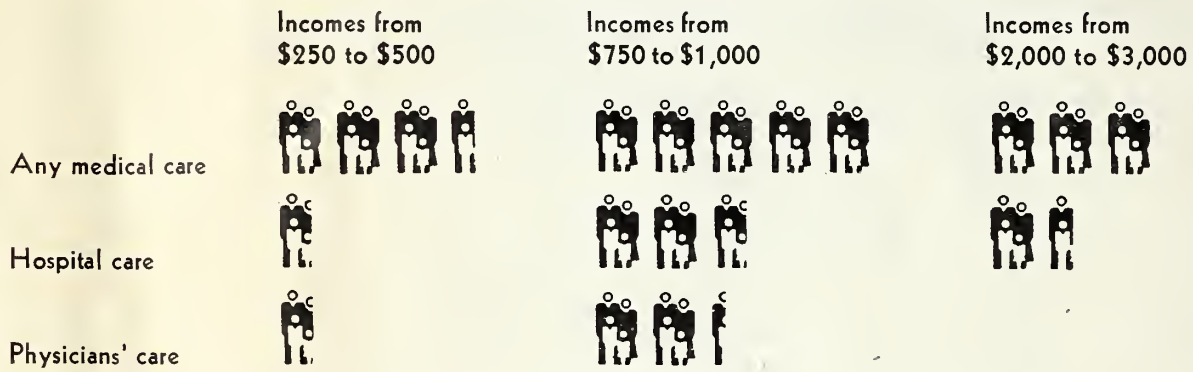
### PERCENTAGE OF FAMILIES BUYING THESE TYPES OF CARE

Each symbol represents 5 percent of all families in the income class

## FEW FARM FAMILIES RECEIVE FREE MEDICAL CARE

Few farm families receive medical care without cost and the free care received by these few is largely limited to hospital care and physicians' care. Free care is not, however, confined to the lowest income groups. Relatively more families with incomes from $750 to $1,000—the middle-income group among farm families—received free care than in any other income group. "Free care" includes "charity work" by physicians, care received without cost from philanthropic institutions, Government agencies and employers, care received from relatives and friends, and "professional courtesy" extended to the families of other professional persons.

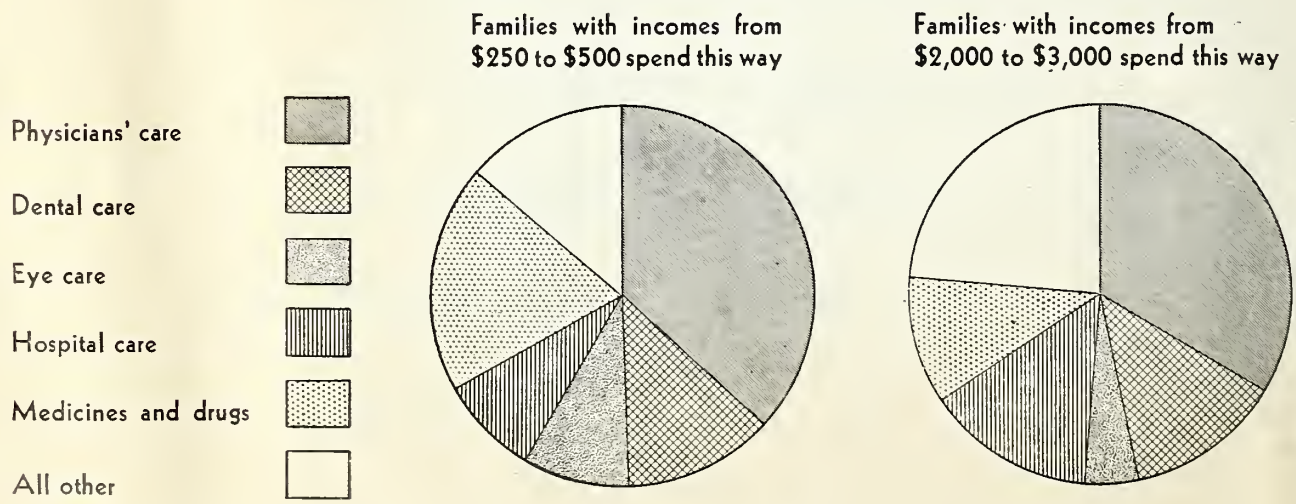
### PERCENTAGE OF FAMILIES RECEIVING FREE MEDICAL CARE




Each symbol represents 2 percent of all families in the income class

## HOW FARM FAMILIES SPEND THEIR MEDICAL DOLLAR

Although the amount spent for each type of medical care increases with income in almost all cases, the proportion of the total medical expense used for certain items decreases. Among those items for which a decreasing proportion is spent as income increases are physicians' care, medicines and drugs, and eye care. Hospital care and "all other" take an increasing share. The proportion spent for dental care remains about the same at various levels of income.



# PART 2. MEDICAL CARE EXPENDITURES AS THEY AFFECT INDIVIDUAL FARM FAMILIES

Although it is possible to generalize about the medical expenditures of large groups of people, such generalizations do not apply to particular families. The range within which the medical expenses of a certain family may fall is very wide. Moreover, it is impossible to predict the amount of illness and the consequent expense that any particular family will have in any given year.

Average yearly expenditures for medical care have significance for the individual family only when they are considered in relation to the amount it may expect to have to spend in the course of its lifetime; it has little significance for the family's annual budget. In a given year very few families will spend an amount equivalent to the average expenditures of a group for medical care. For most families in any income group the year's expenditures will be far below the average. For a few it will be well above. There is no tendency for the expenditures of individual families to cluster around the average as is the case with most other major expenditures for family living.

Medical expenses may be separated into two kinds. The first, which may be termed "normal" expenditures, includes treatment of the ordinary run of minor illnesses or chronic conditions and some preventive care. A very large proportion of the families in any income group will incur expenses of this kind only. They will be the families with small expenditures. A few families in any income group, however, will suffer serious illnesses or accidents—"catastrophic" illnesses, so-called because of their unpredictable and overwhelming nature. These are the families whose expenditures will be many times the normal amount and may consume a large part of the year's total income.

While not all hospitalized illnesses are catastrophic, and conversely, not all catastrophic illnesses are hospitalized, the group of families that incurred expenses for hospital care during the course of the year may be considered representative of families suffering catastrophic illnesses. The total expenditures for medical care in families that had hospital expenses were about triple the expenditures of the remaining families in the same income group. Although their hospital bills were large, hospital expense formed only about a quarter of their total expense for medical care. No one type of service is responsible for the high cost of catastrophic illness.

Among families with high medical expenses, expenditures for physicians, dentists, and refractions and eyeglasses are more important than with families whose medical expenses are low. The latter spend more than half their medical dollar for medicines and drugs. Since the study on which these charts are based was a study of money expenditures, it provides no data concerning the amount of free medical care obtained by families or the circumstances under which it was received. Other studies have shown, however, that it is for catastrophic illness that most free care is given. Many families able to meet their normal medical expenditures are unable to bear the cost of catastrophic illness.

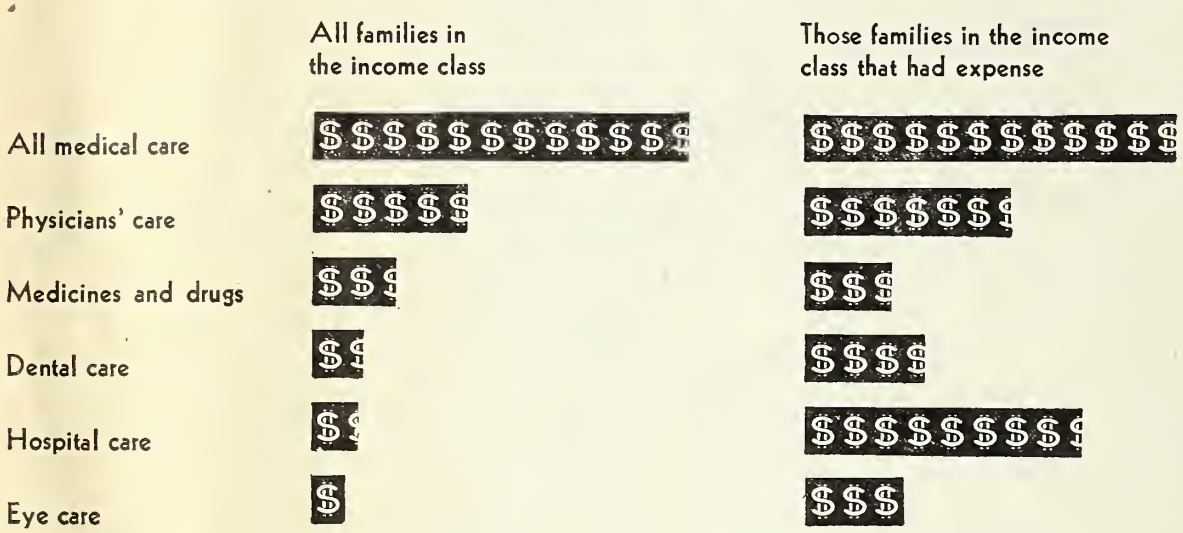
Because the family has so little control over the amount it may be called upon to spend for medical care, the effects of these expenditures on its financial management are significant. When a family is faced with a medical bill, it may meet it out of current income, it may draw on previous savings, or it may go into debt. In the long run the family may adjust other expenditures to balance the medical bill or it may reduce its current and accrued savings. The medical bills of that part of the group with heavy medical expenses are frequently high enough to make total expenditures for family living greater than the year's total income and to preclude any saving during the year.

To illustrate the possible variations in expenditures among families with approximately the same income, the expenditures of farm families in the median-income group are analyzed in the following pages. These families had incomes from $750 to $1,000. The general statements made about this group will hold true for other income groups also, although the exact figures will differ.

## THE FAMILIES THAT INCUR THE EXPENSE PAY THE BILLS

Average costs for all families are useful when considering the costs of medical care for the entire population. They are meaningless, however, when the actual costs of families that pay the bills are under consideration. Not all families have expenditures for any medical care or for each type of care. When families without expense are eliminated, the average of the bills to be met by those families that actually incurred the expense becomes larger. If a certain type of expense, such as for medicines, is incurred by a large proportion of families, the difference between the average cost to all families and the average cost to families paying the bills is small; if the expense is incurred by a few families only, such as that for hospital care, the difference in the averages may be very great.

### AVERAGE MEDICAL EXPENSES OF MIDDLE-INCOME FARM FAMILIES




Each symbol represents $5

## WHEN SOMEONE GOES TO THE HOSPITAL, EXPENSE FOR MEDICAL CARE SHOOTS UP

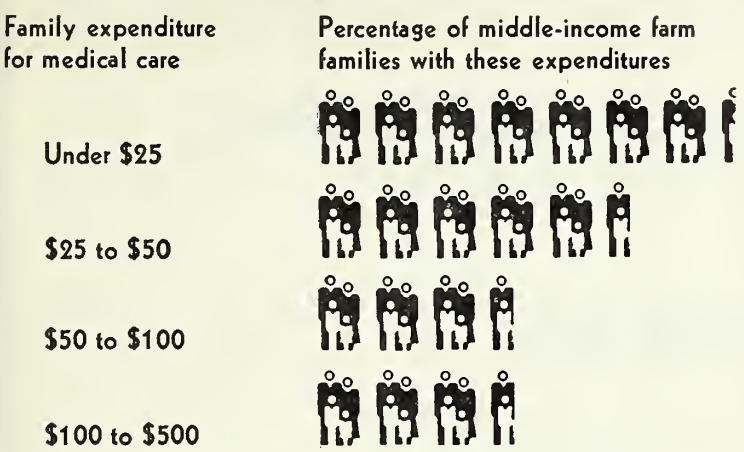
In general, families that have hospital bills are among those who spend most for medical care. Among farm families with incomes from $750 to $1,000, they spend over three times as much as families that have no hospital bills. The hospital bill is only part of the total cost of illness that requires hospital care. Physicians' bills increase, particularly if surgery is involved. There may be a nurse's bill or bills for X-rays and laboratory services.

### AMOUNT SPENT FOR ALL MEDICAL CARE BY MIDDLE-INCOME FARM FAMILIES

Each symbol represents $5

## MEDICAL EXPENSES OF MANY FAMILIES ARE NOT BURDENSOME

The cost for medical care that must be met in a given year vary widely. Some families spend nothing, others as much as $500. In any one year the expenditures of almost two-thirds of the families are well below the average of the group. The small bills of many families are in sharp contrast to the very large bills of a few.

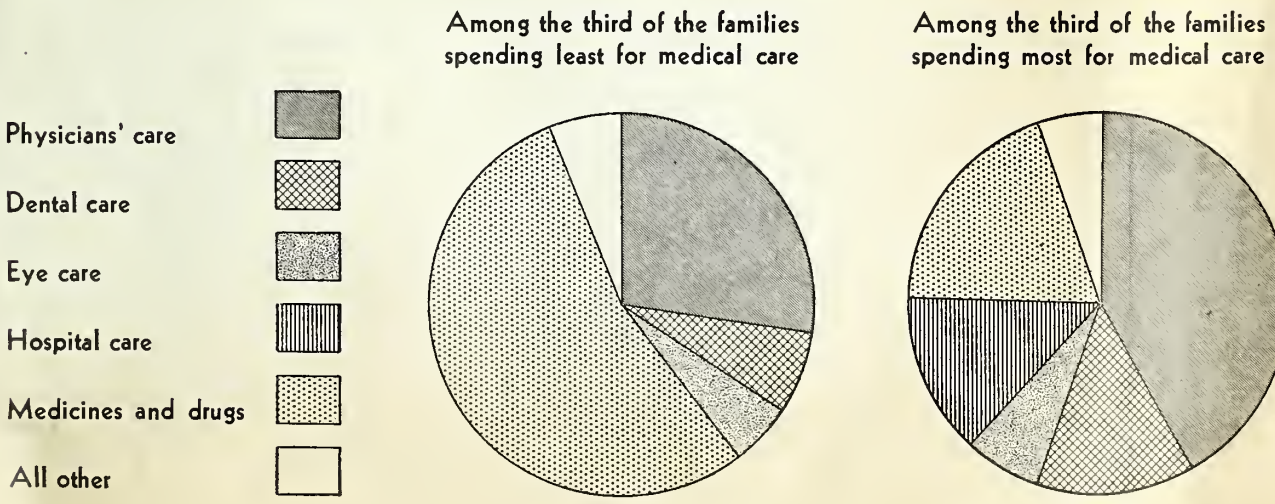



Each symbol represents 5 percent of families

## COMPOSITION OF MEDICAL BILL VARIES WITH ITS SIZE

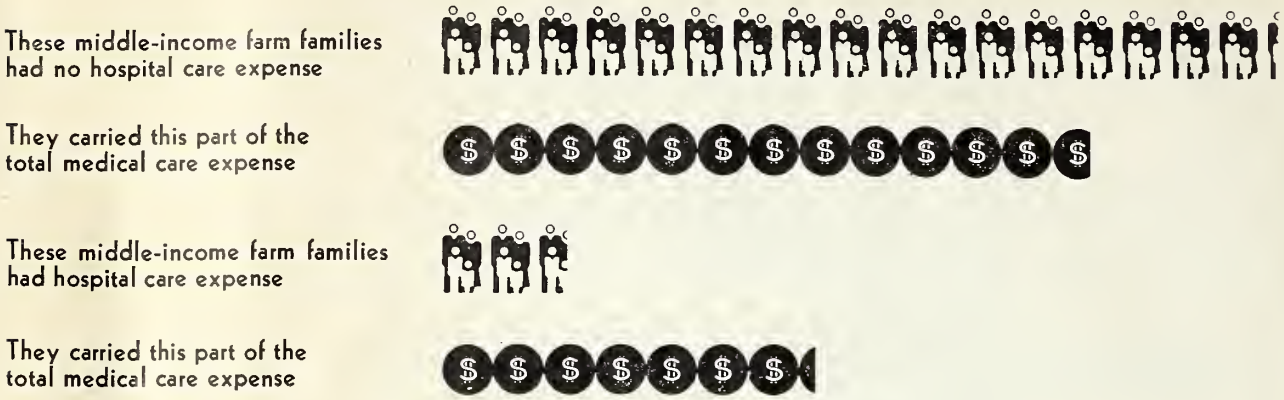
When the total expenditure for medical care is small, medicines and drugs account for more than half of it and physicians' care for slightly more than a quarter. As might be expected, the third of the families that had the least expense for medical care reported no expenditures whatever for hospital care. Among the third of the families with the highest medical care expenses, the largest share—somewhat less than half of the total—was used for physicians' services. Hospitalization took an eighth. The proportions used for eye care and dental care each were larger than among families with low expenditures. Medicines and drugs, on the other hand, although they cost about five times as much for families with high expenditures, consume only a third as much of the total bill as among low-expenditure families.

### DISTRIBUTION OF MEDICAL DOLLAR OF MIDDLE-INCOME FARM FAMILIES



## MEDICAL EXPENSES ARE UNEVENLY DISTRIBUTED

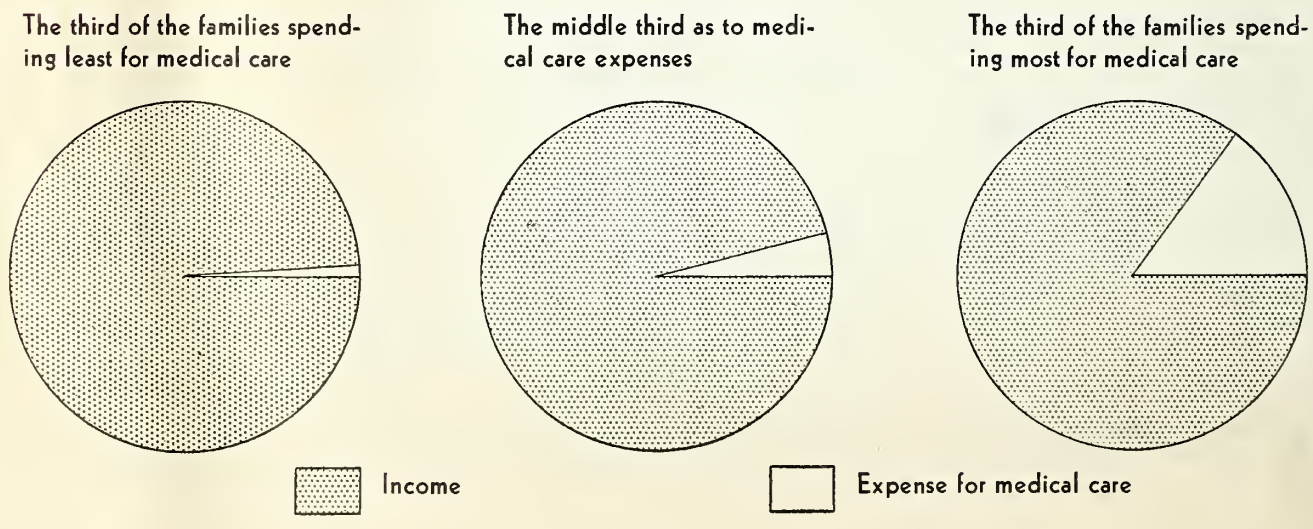
Although only 14 percent of the farm families with incomes from $750 to $1,000 have expenses for hospital care, they pay 36 percent of the total cost of medical care for all farm families with comparable incomes.




## YOU CAN'T PREDICT THE SLICE MEDICAL CARE WILL TAKE

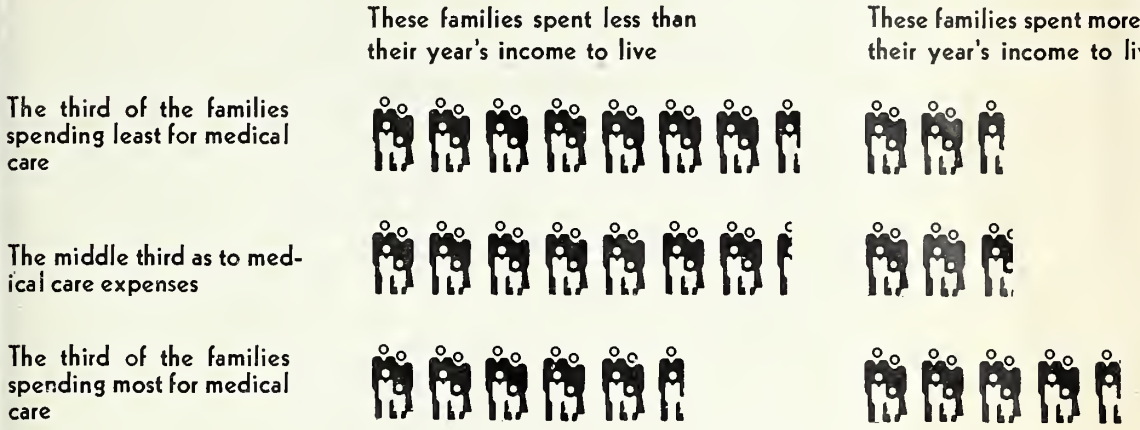
If farm families with incomes from $750 to $1,000 are divided into three groups according to the amount spent for medical care, the cost to the third spending least is negligible—about 1 percent of total income. The cost to the middle third, about 4 percent of income, can be met without strain also. But an expenditure of 15 percent of total income for medical care, the amount required of the third with highest expenditures, may well prove burdensome.

### PROPORTION OF INCOME USED FOR MEDICAL EXPENSES BY MIDDLE-INCOME FARM FAMILIES



## FEWER FAMILIES CAN SAVE WHEN MEDICAL EXPENSES ARE HIGH

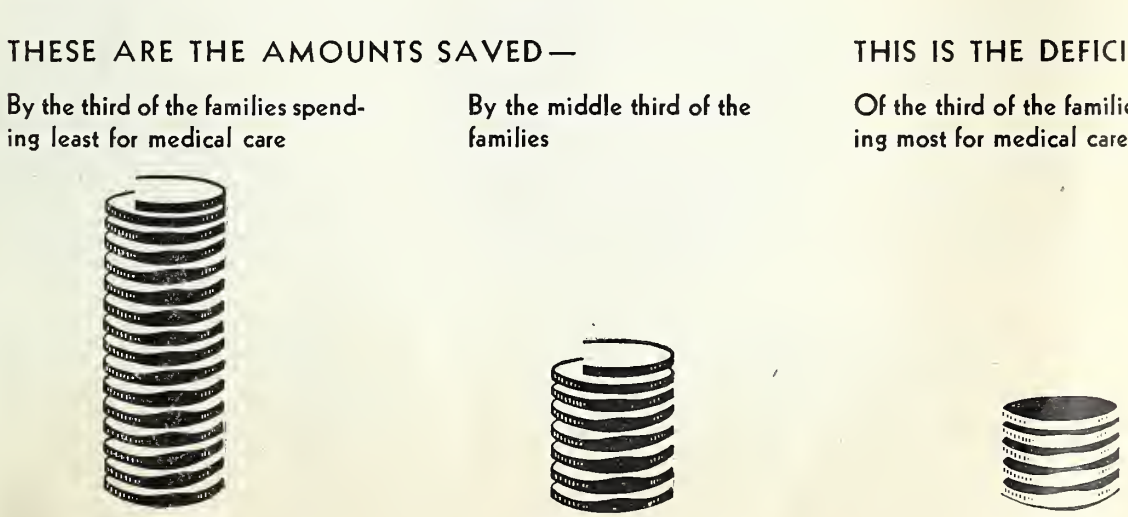
Medical care is not the only item that may throw the family budget out of balance, but it is a frequent cause. Among farm families with incomes from $750 to $1,000 the proportion of families with high expense for medical care whose living expenses exceed their income is almost twice the proportion of those with low expense for medical care.




Each symbol represents 10 percent of middle-income farm families

## FAMILIES CAN SAVE LESS WHEN MEDICAL EXPENSES ARE HIGH

Families that have to meet large medical bills find it harder to get ahead than do those that have small medical expenses. Among farm families with incomes from $750 to $1,000, two-thirds had medical expenses of $50 or less. These families saved something during the year. The remaining third, whose medical bills ranged up to $500, spent more for living, on the average, than their year's total income and had to draw on previous savings or run up debts.




Each symbol represents $10

# PART 3. RURAL-URBAN DIFFERENCES IN MEDICAL CARE EXPENDITURES

There are differences as well as similarities in the spending patterns of farm and urban families where medical care is concerned. Underlying the differences in the amounts spent for medical care by these families is the fundamental difference in money income between the two groups. Farm families spend slightly more for medical care than urban families with the same money incomes. This fact, however, is of no actual significance for the group as a whole, since most farm families spend less for medical care than most urban families because their incomes are lower. In 1941 the median net cash income of farm families was less than half that of urban families. Comparisons are made in this section between median-income farm families and median-income urban families since they represent average conditions for the two groups.

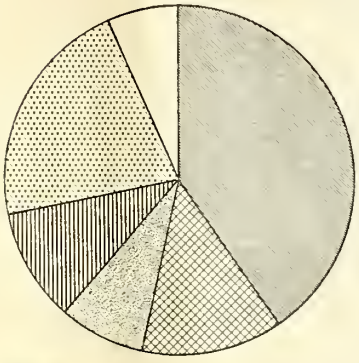
Middle-income farm families spend less for medical care than middle-income urban families. Since farm families are larger than urban families, this disparity is even greater when the figures are translated from expenditures per family to expenditures per person.

In cities, as on farms, almost all families buy some type of medical care. Among median-income families, the proportion of families spending for physicians' care is the same on farms, in villages, and in cities and towns. The percentage buying hospital care, dental care, and eye care, however, is greater among urban than among rural families. On the other hand, a larger share of the medical expenditures of middle-income farm families than of urban families goes for physicians' care, medicines and drugs, and eye care, while a smaller share goes to dental and hospital care.

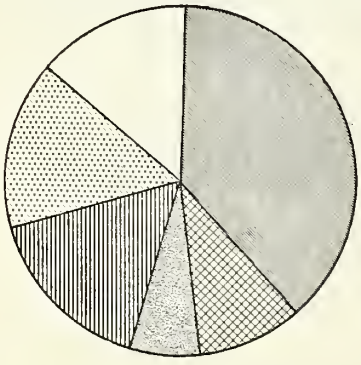
## HOW MIDDLE-INCOME FAMILIES SPEND THEIR MEDICAL DOLLAR

Middle-income farm families spend a larger part of their medical care dollar than middle-income families in towns and cities for physicians' care, medicines and drugs, and eye care. They spend a smaller part for dental and hospital care, and for all other items.

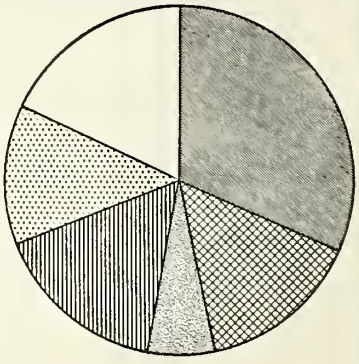
Farm families spend their medical dollar this way



Village families spend their medical dollar this way



Urban families spend their medical dollar this way



Physicians' care

Dental care

Eye care

Hospital care

Medicines and drugs

All other

## FARM FAMILIES SPEND LESS THAN URBAN FAMILIES FOR THE MEDICAL CARE OF EACH MEMBER

Although farm families spend somewhat more for medical care than urban families with similar incomes, the expenditure per person is smaller. Farm families are larger than urban families; the money they spend must cover the care of more people.

### FAMILIES SPEND THESE AMOUNTS PER PERSON

INCOMES UNDER $500

On farms

In villages

In cities and towns

INCOMES FROM $1,000 TO $1,500

On farms

In villages

In cities and towns

INCOMES FROM $3,000 TO $5,000

On farms

In villages

In cities and towns

Each symbol represents $2

## WHAT MIDDLE-INCOME FAMILIES SPEND FOR MEDICAL CARE

Farm income is lower than urban; farm families are larger. Middle-income farm families, with incomes from $750 to $1,000, spent two-thirds as much for medical care as middle-income city families with incomes from $1,500 to $2,000. They spent a little more than half as much per member.

### MIDDLE-INCOME FAMILIES BUY THESE AMOUNTS OF CARE

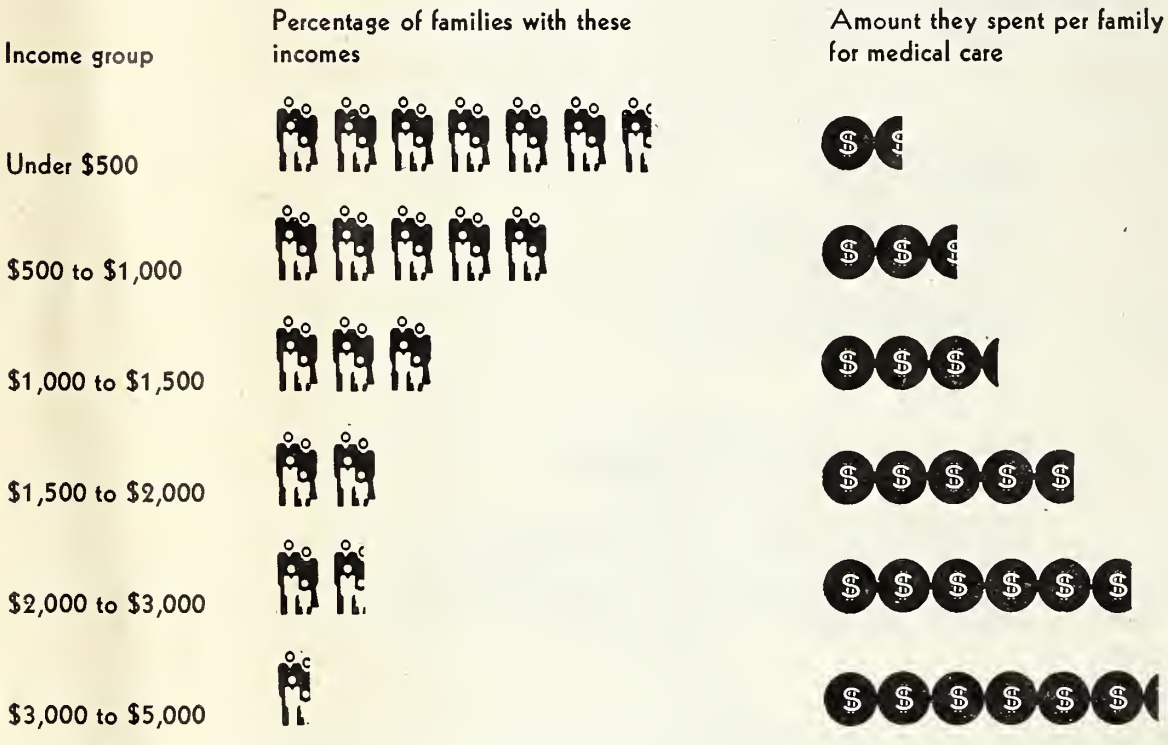
| | For each member | For the whole family |
|---|---|---|
| On farms | | |
| In villages | | |
| In cities and towns | | |

Each symbol represents $4

# WHAT FAMILIES SPEND FOR MEDICAL CARE ON FARMS, IN VILLAGES, AND IN CITIES AND TOWNS

Farm families spend more for medical care than city families with comparable money incomes except at high-income levels. Because income is not distributed in the same way among farm, rural nonfarm, and urban families, however, the average amounts spent for medical care by the urban families is greater than that spent by farm or village families. More than half of all farm families have incomes of less than $1,000, and a third have incomes of less than $500. Fewer than half the village families have incomes lower than $1,000, and fewer than a fourth have incomes under $500. Less than a fourth of the urban families have incomes under $1,000, and less than a tenth of them have incomes under $500.

ON FARMS



## IN VILLAGES

| Income group | Percentage of families with these incomes | Amount they spent per family for medical care |
|---|---|---|
| Under $500 | | |
| $500 to $1,000 | | |
| $1,000 to $1,500 | | |
| $1,500 to $2,000 | | |
| $2,000 to $3,000 | | |
| $3,000 to $5,000 | | |

## IN CITIES AND TOWNS

| | | |
|---|---|---|
| Under $500 | | |
| $500 to $1,000 | | |
| $1,000 to $1,500 | | |
| $1,500 to $2,000 | | |
| $2,000 to $3,000 | | |
| $3,000 to $5,000 | | |

Each symbol represents 5 percent of all families in each type of community

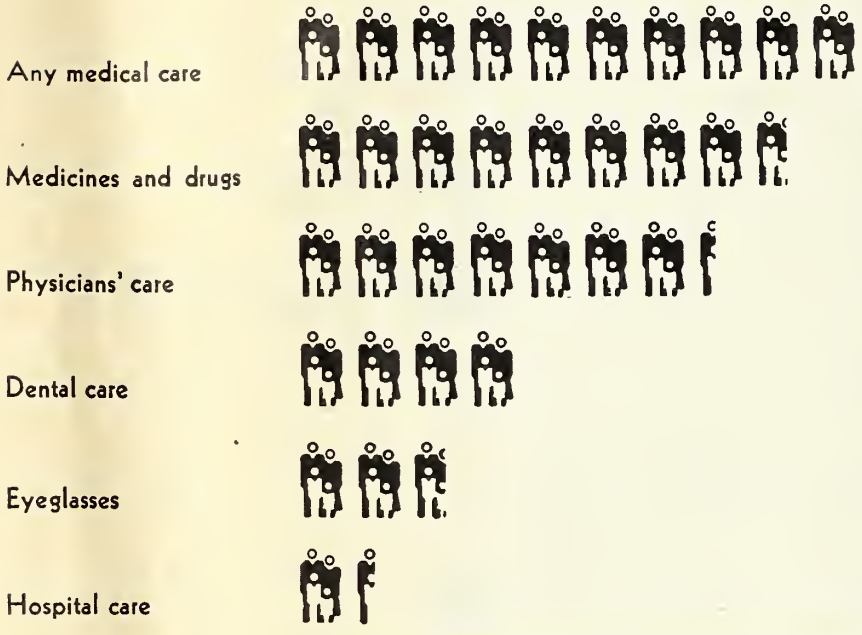
Each symbol represents $20

# THE MIDDLE-INCOME FAMILIES THAT BUY CARE AND THE TYPES OF CARE THEY BUY

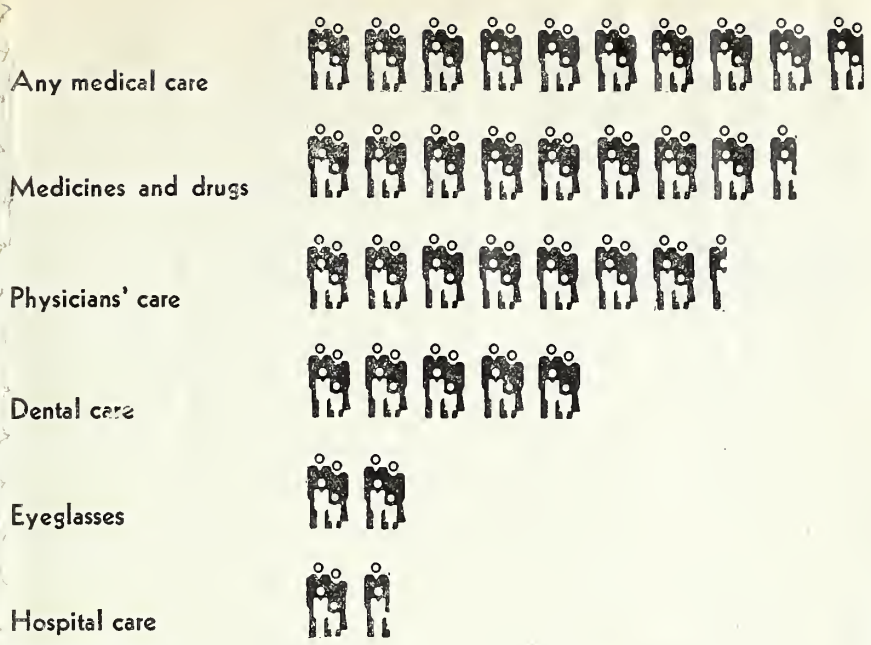
Although middle-income urban families (incomes from $1,500 to $2,000 in 1941) spent more than middle-income farm families (incomes from $750 to $1,000) or village families (incomes from $1,000 to $1,500), there is almost no difference in the proportions buying any care and the proportions buying physicians' care. Relatively more urban than farm families buy hospital care and dental care; relatively more farm than urban families buy eyeglasses and medicines and drugs.

## THESE FAMILIES BOUGHT THESE TYPES OF CARE

ON FARMS




Each symbol represents 10 percent of the families in the income group



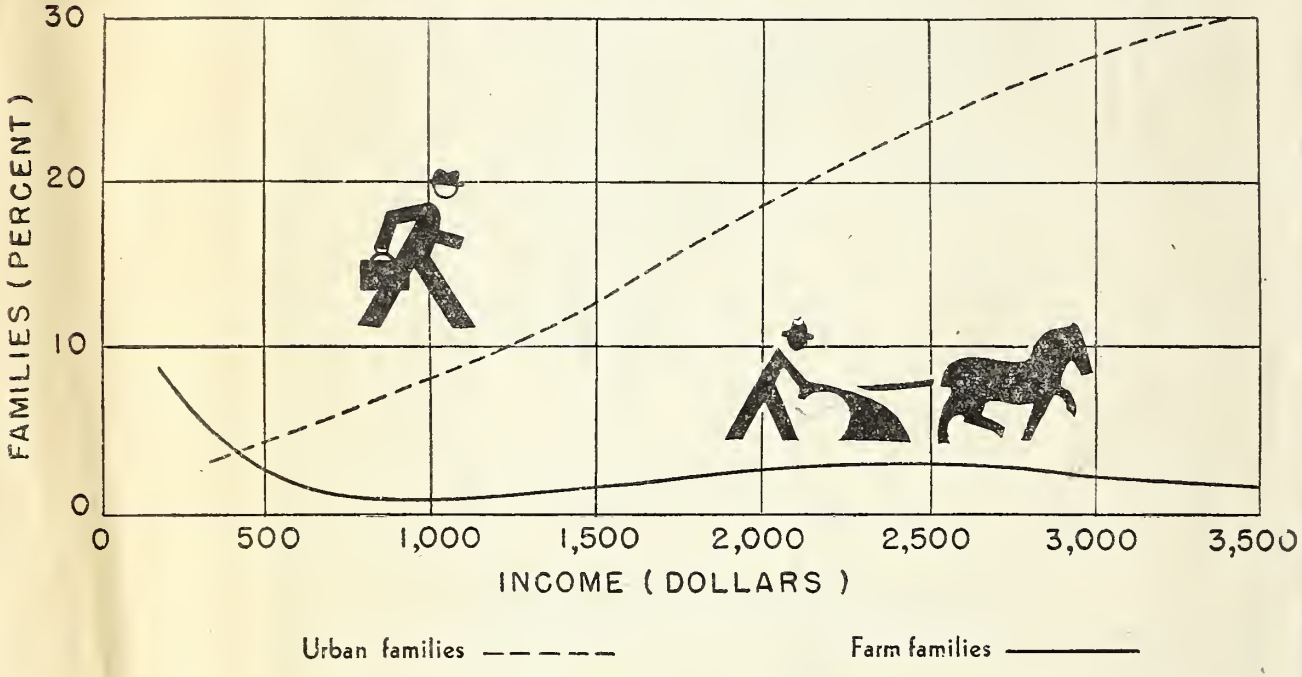

IN CITIES AND TOWNS

Each symbol represents 10 percent of the families in the income group

## FEW FARM FAMILIES SUBSCRIBE TO PREPAYMENT PLANS

Prepaid medical care includes Blue Cross and similar plans for prepayment of hospital bills and plans covering professional services as well. Among urban families the percentage of families spending for prepaid medical care increases with income until incomes exceed $5,000. Village families follow the same pattern but with a smaller percentage of subscribers at all income levels. Farm families, however, present a very different pattern; the highest percentage of prepayment subscribers is among the low-income families; the percentage is small at each income level.

**PERCENTAGE OF URBAN AND FARM FAMILIES SUBSCRIBING TO PREPAYMENT PLANS**

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